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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,234	08/17/2005	Patrick Wheeler	16170.2	1825
22913 WORKMAN N	7590 02/08/2007 YDEGGER	EXAMINER		
(F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111			LAXTON, GARY L	
			ART UNIT	PAPER NUMBER
			2838	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)			
Office Action Occurrence	10/511,234	WHEELER ET AL.			
Office Action Summary	Examiner	Art Unit			
	Gary L. Laxton	2838			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 22 No	ovember 2006.				
	action is non-final.	·			
3) Since this application is in condition for allowan		secution as to the merits is			
closed in accordance with the practice under E.	•				
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Disposition of Claims					
4) Claim(s) <u>1-4,6,8,10-13,15,17 and 19-22</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw	4a) Of the above claim(s) is/are withdrawn from consideration.				
5) Claim(s) is/are allowed.		· .			
6) Claim(s) <u>1-4,6,8,10-13,15,17 and 19-22</u> is/are r	ejected.				
7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/or	election requirement.				
Application Papers					
9) The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by the Exa	- · · · · · · · · · · · · · · · · · · ·				
Priority under 35 U.S.C. § 119	•				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:					
1. ☐ Certified copies of the priority documents					
2. Certified copies of the priority documents	• •				
3. Copies of the certified copies of the prior	•	ed in this National Stage			
application from the International Bureau		4			
* See the attached detailed Office action for a list of the certified copies not received.					
	•				
Attachment(s)		•			
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date  Notice of Informal Patent Application					
i) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application 6) Other:					
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Application/Control Number: 10/511,234

Art Unit: 2838

## **DETAILED ACTION**

## Response to Arguments

1. Applicant's arguments with respect to claims 1-4, 6, 8, 10-13, 15, 17 and 19-22 have been considered but are moot in view of the new ground(s) of rejection.

## Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 19-22 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs and electrical signals are non-statutory subject matter.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-4, 6, 8, 10-13, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Bernet.

Application/Control Number: 10/511,234

Art Unit: 2838

Page 3

Bernet discloses a matrix converter (fig. 1) having current commutation circuitry with bidirectional switches (Cr11, Cr21, Cr23 etc.) arranged in a configuration to begin initiation of one switch before deactivation of another switch wherein the current commutation interval is minimized and is considered to approach zero. And, a first switch and a second switch whereby, in a first mode in use, the first switch is activated and the second switch is not activated, and the current commutation circuitry means is operable to activate the second switch means before the first switch means is deactivated (e.g. fig. 5-7).

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary L. Laxton whose telephone number is (571) 272-2079. The examiner can normally be reached on Monday thru Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on (571) 272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2838

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gary L. Laxton Primary Examiner Art Unit 2838

2/2/2007